COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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JUN 2 4 2005

PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY FOR) CASE NO
FOR THE CONSTRUCTION OF A 138 kV ELECTRIC) 2005-00089
TRANSMISSION LINE IN ROWAN)
COUNTY, KENTUCKY)

SECOND PETITION FOR CONFIDENTIAL TREATMENT OF INFORMATION

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POWER COOPERATIVE, INC. FOR A CERTIFICATE)
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ROWAN COUNTY, KENTUCKY)

SECOND PETITION FOR CONFIDENTIAL TREATMENT OF INFORMATION

Comes now the petitioner, East Kentucky Power Cooperative, Inc. ("EKPC") and, as grounds for this Second Petition for Confidential Treatment of Information (the "Petition"), states as follows:

- 1. This Petition is filed in conjunction with the filing of EKPC's responses to Commission staff's First Data Request dated June 16, 2005, in this case, and relates to confidential information contained in those responses that is entitled to protection pursuant to 807 KAR 5:001 Section 7, KRS 61.878 (1) (c) 1, House Bill 59 which became effective June 20, 2005 and related law.
- 2. The information for which confidential treatment is requested is contained in the response to Staff Data Request 1 which relates to the most recent ECAR transmission assessment and in response to Staff Data Requests 21 and 22 which relate to

the loads, generator output levels and purchased power levels used in modeling in the April 2002 report and 2004 operational update.

- 3. The grounds for requesting confidential treatment of the information identified in response to Data Request 1 is that ECAR prohibits its members from disclosing anything contained in this report beyond the Executive Summary. The reason for this is that this report provides the exact locations at which the entire regional transmission system would be most vulnerable to terrorist attack in order to cause the greatest amount of disruption to the electrical grid. Due to Homeland Security reasons, this must be kept confidential.
- 4. The grounds for requesting confidential treatment of the information requested in Data Requests 21 and 22 is that information related to EKPC-owned generation output levels and purchased power levels for scenarios used in transmission system planning studies can reveal the level of dependency of EKPC on the market for purchased power in both the normal system configuration and in the event that any of the generators are forced off line. Because generator unavailability can be widely known, knowledge of the level of dependency of EKPC on the market in normal conditions or any given generator outage situation would give an unfair commercial advantage to marketers, independent power producers or other utilities in the pricing and availability of power to EKPC. This would in turn increase the cost of this purchased power to EKPC and its members.
- 5. Along with this Petition, EKPC has enclosed one copy of the response to Data Request 1 on a CD-Rom in pdf format because of the length (137 pages) of this document. Everything in the document beyond the Executive Summary is to be

considered designated as confidential. The release of this information as stated above would jeopardize the security of the regional transmission system and would therefore create a major threat to Homeland Security. This type of information has been exempted from the Open Records Law (KRS 61.870 through KRS 61.884) by House Bill 59 which was passed by the 2005 General Assembly and became effective June 20, 2005. EKPC has also enclosed 10 copies of the complete response to this data request with the confidential information redacted.

Also, EKPC has enclosed along with this Petition a complete copy of its responses to Staff Data Requests 21 and 22 with the confidential information identified by highlighting in yellow and 10 copies of the complete responses to these data requests with the confidential information redacted. The identified information is not in the public domain and it is distributed within EKPC only to persons with a need to use it for business purposes. It is entitled to confidential treatment pursuant to 807 KAR 5:001 Section 7 and KRS §61.878 (1) (c) 1, for the reasons stated hereinabove, as information which would permit an unfair commercial advantage to competitors of EKPC if disclosed. The subject information is also entitled to protection pursuant to KRS §61.878 (1) (c) 2c, as records generally recognized as confidential or proprietary which are confidentially disclosed to an agency in conjunction with the regulation of a commercial enterprise.

WHEREFORE, EKPC respectfully requests the Public Service Commission to grant confidential treatment to the identified information and deny public disclosure of said information.

Respectfully submitted,

DALE W. HENLEY

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ATTORNEYS FOR EAST KENTUCKY POWER COOPERATIVE, INC.

CERTIFICATE OF SERVICE

This is to certify that an original and 10 copies of the foregoing Petition for Confidential Treatment of Information in the above-styled case were hand delivered to the office of the Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601, and one copy was mailed to each party of record, this 23rd day of June, 2005.

SHERMAN GOODPASTER III

(H:legal-2005-00089-2ndpet-conf-info)

EAST KENTUCKY POWER COOPERATIVE ASSESSMENT OF EXPECTED SYSTEM PERFORMANCE 2005 SUMMER CONDITIONS

May 4, 2005



EXECUTIVE SUMMARY

This report presents an assessment of the expected performance of the East Kentucky Power Cooperative (EKPC) bulk (138 kV and above) electric transmission system for the 2005 summer period. Also, the LGEE bulk system (considered to be 138 kV and above) was monitored for its response to EKPC contingencies. The results contained in this report were obtained by performing an AC analysis using the following power flow models of 2005 summer peak conditions:

- The ECAR/MEN/VEM 2005 Summer Appraisal Model
- The ECAR/MEN/VEM 2005 Summer Appraisal Model with a 4000 MW north-tosouth incremental transfer superimposed

The following table summarizes the results of the powerflow analysis on the base model:

	Base Case F	Results	
Normal Conditions Single Contingency Single Contingency plus unit outage	Total number of facilities overloaded 0 0 0 0	Total number of potential contingencies causing overloads	Range of overloads
Double Contingency	11	21	101.3 - 149.9%

Two (2) double-contingency scenarios resulted in thermal violations in excess of 130% of a summer emergency rating. For these scenarios, any facilities exceeding this threshold were tripped and the case was then solved to determine if the potential for cascading exists. Of the two scenarios tested, one would not solve after tripping was simulated. However, this scenario is considered a local area issue. The remaining scenario tested returned to a state where no additional tripping was expected.

Only one voltage problem was identified in the base case for single contingency conditions. This voltage was only marginally low (89.6%). Twelve double-contingency combinations resulted in low voltages. The worst of these resulted in voltages as low as 64%.

The following table summarizes the results of the powerflow analysis on the sensitivity case:

	Sensitivity Case	e Results	
Normal Conditions	Total number of facilities overloaded	Total Instances of overloads	Range of overloads
Single Contingency	2		107.2 - 124.1%
Single Contingency plus unit outage	13	36	100.4 - 133.1%
Double Contingency	39	154 874	150.0 - 100.1% 164.9-100.1%

The scenarios that resulted in overloads greater than 130% of summer emergency ratings were tested for potential cascading. These scenarios were found to have the potential for cascading and load loss in the central and eastern Kentucky areas.

The facilities of particular concern are the Avon 345-138 kV transformer, the Avon-Boonesboro North Tap 138 kV line, and LGEE's Goddard-Rodburn 138 kV line. These facilities all have the

potential for significant overloading for either single-contingency or double-contingency conditions. Due to this, it is imperative that CT generation in the central Kentucky area be dispatched to avoid excessive loading on these facilities if the critical contingencies were to occur.

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In addition to the thermal overloads, significant voltage problems were observed in the stress case for both single-contingency and double-contingency conditions. Many of the single-contingency problems were observed in the Rowan County area. These problems exist due to the delay in the construction of EKPC's Cranston-Rowan County 138 kV line.

Seven double contingency combinations were identified in the stress case which were divergent. Load shedding of up to 90 MW was necessary to obtain acceptable solutions.

The P-V analysis performed shows that voltages on the EKPC system are expected to be stable for incremental north-south transfer levels of up to 7500 MW, provided that a significant amount of CT generation is online in central Kentucky (at JK Smith and Brown). If the CT generation is not online, voltage collapse appears to be a potential problem for incremental transfers above 5500 MW.

This assessment indicates that the EKPC and LGEE interconnected system is expected to perform adequately in 2005 Summer if north-south transfers are not occurring. For the base case, the only potential problems identified were for double contingencies. The sensitivity case indicates that severe problems could occur if significant north-south transfers are ongoing. The sensitivity case and the P-V analysis both indicate the importance of having sufficient generation dispatched in the central Kentucky area. A combination of reduced generation in central Kentucky, north-south transfers, and transmission outages could result in unacceptable conditions for both the EKPC and LGEE systems.

DATA RESPONSE 21 and 22

